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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/757,470

01/11/2001

Nobuhiro Fujinawa

105261.01

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02/26/2004

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EXAMINER

SENI, BEHROOZ M

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/757,470

Applicant(s)

FUJINAWA, NOBUHIRO

Examiner

Behrooz Senfi

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) 6-11 and 14-16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 13¹³ are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al (US 2003/0128889) in view of Ogikubo (US 5,396,282).

Regarding claim 1, Maeda '889 discloses "an image reading device" (i.e. fig. 1), comprising: "an infrared component separator that separates color components of an image light flux" (i.e. fig. 1, unit 21 for separating the light flux 13 into four colors (including infrared), and "visible image capturing device" (i.e. device 18 and optical 25), and the "focal adjustment device that a position of the image forming optical system relative to the transmissive original and means for image forming position decision making that determines the position of the image forming optical system" and control device that implements control on the focal adjustment device based upon a decision made by the means for image forming position" reads on (page 11, section 0135). Maeda '889 fails to explicitly teach "two separate image capturing device, one infrared and one visible image capturing". However the above claim limitations are well known and used as evidenced by Ogikubo '282 (i.e. fig. 2, CCD cameras 124 and 125). Therefore, taking the combined teaching of Maeda '889 and Ogikubo '282 as a whole, it

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would have been obvious to use two or more detectors (CCDs) for detecting the four separated radiant flux as suggested by Ogikubo '282 (col. 1, lines 59+).

Regarding claim 2, combination of Maeda '889 and Ogikubo '282 teaches "an infrared component detector that detects a level of the infrared component" (i.e. abstract, lines 3 – 4 of Maeda ') and "a correction device that detects a defect signal" (i.e. abstract, lines 3 – 6 of Maeda).

Regarding claim 3, combination of Maeda '889 and Ogikubo '282 teaches "a defective infrared component detector that detects a defective infrared component and a correction coefficient calculator that obtains a correction coefficient by calculating (first infrared component level) / (defective infrared component level) (i.e. abstract, lines 3 – 9 of Maeda) and "multiplier that calculates the corrected visible component level by multiplying the defective visible component level at the defective position in the transmissive original" (i.e. abstract 12 – 15 of Maeda).

Regarding claim 4, combination of Maeda '889 and Ogikubo '282 teaches "image capturing device receives the infrared component of light passing through the trasmissive original at a plurality of pixels and outputs a plurality of image signals each indicating an intensity level of the component of light received at the associated pixel" (i.e. page 3, section 0025 of Maeda).

Regarding claims 5 and 13, combination of Maeda '889 and Ogikubo '282, fig. 1 of Maeda '889 teaches LED drive circuit operates in accordance with an instruction from CPU 11 and selectively emits light, which reads on limitation "selecting either the visible image signal or the infrared image signal" as claimed.

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Regarding claim 12, the limitations claimed are substantially similar to claim 1, therefore the grounds for rejecting claim 1, also apply here. Furthermore, the invention of Maeda '889 relates to an image processing method and storage medium and computer implemented program (i.e. fig. 1, host computer 1 and CPU 11, col. 1, section 0003), which reads on additional limitation "storage medium" as claimed.

Claim Objections

3. Claims 6 – 11 and 14 – 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

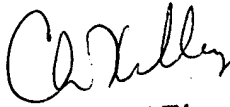
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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

2/11/2003


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600